

Jharsuguda Engineering School, Jharsuguda

Department of Civil Engineering

LESSON PLAN

Course Name- **TRANSPORTATION ENGINEERING (Th-2)**

Semester: 3rd Semester (Diploma CE)

Weekly Periods: 3

Total Periods: 45

Faculty: **Amit Kumar Sahu, Sr. Lecturer, Civil**

Bijayalaxmi Hembram, Lecturer-I, Civil

Week No.	Period Topics (P1, P2, P3)	Unit
1	P1: Introduction to Transportation & Role in Nation Development P2: Scope & Characteristics of Roads P3: Modes of Transportation – Land, Water, Air	I
2	P4: Merits & Demerits of Roadway and Railway P5: Classification of Roads, Road Alignment Factors P6: Revision of Unit I	I
3	P7: Camber – Definition, Purpose & Types P8: Kerbs, Road Margin, Formation, Right of Way P9: Design Speed (IRC)	II
4	P10: Gradient – Types P11: Sight Distance – SSD P12: Curves – Horizontal & Vertical	II
5	P13: Extra Widening (Numerical) P14: Super Elevation (Numerical) P15: Cross Sections of Highways	II
6	P16: Revision of Unit II P17: Tests on Aggregates P18: Bitumen Tests	III
7	P19: Softening Point Test, Pavement Types P20: Pavement Components P21: Construction of WBM Road	III
8	P22: Construction of WMM Road P23: Flexible Pavement, Bituminous Road P24: Bitumen Types, Emulsion, Cutback	III
9	P25: Prime Coat, Tack Coat, Seal Coat P26: Cement Concrete Road (Methods) P27: Joints, Fillers & Sealers	III
10	P28: Revision of Unit III P29: Classification & Zones of Indian Railways P30: Permanent Way – Components	IV
11	P31: Rail Gauge – Types & Selection P32: Rail & Rail Joints P33: Creep of Rail	IV
12	P34: Sleepers – Types & Density P35: Ballast – Types & Suitability P36: Rail Fixtures & Fastenings	IV
13	P37: Revision of Unit IV P38: Rail Alignment Factors P39: Track Cross Sections	V
14	P40: Railway Track Geometrics P41: Grade Compensation, Cant Deficiency P42: Coning of Wheel, Tilting of Rail	V
15	P43: Points & Crossings, Junctions P44: Railway Stations – Types & Site Selection P45: Station Yard & Maintenance Duties	V

1/1.

(Signature)
14/07/2015
Amit Kumar Sahu
Sr. Lecturer (Civil)