

Discipline :- Civil Engg	Semester :- 4th	Name of the teaching faculty Saroj Ku. Bisoyi
Subject :- Highway Engg	No of days/ Per week class allotted :- 6	Semester from :- 10.03.22 - 10.06.22 No of weeks :- 14
Week	Class Days	Theory / Practical Topics
	1st	
07/03/22	2nd	
to	3rd	
12/03/22	4th	Importance of highway transport
	5th	its mode. short definition like
	6th	IRC, CRF etc.
	1st	Function and Requirement of IRC
	2nd	Organisations of SI. 20 years develop-
14/03/22	3rd	ment Urban road Classification. Geometric
to	4th	design of roads and its criteria.
19/03/22	5th	← Docta Prænima →
	6th	← Hocle →
	1st	Cross-sectional elements of roads
21/03/22	2nd	Shoulder, Kerb, Camber, design
to	3rd	and its function SSD, objective,
26/03/22	4th	Design of OSD, Numerical of SSD
	5th	and OSD.
	6th	Ans
	1st	Super elevation and its necessity
28/03/22	2nd	Numerical of super elevation, Over
to	3rd	turning and its needs, design, Type
02/04/22	4th	of horizontal curve.
	5th	← Utkal Divas →
	6th	Vertical curve and its necessity
	1st	Transition Curve and its uses

04/04/22	2nd	Numerical of transition Curve
to	3rd	Numerical of design for cant
09/04/22	4th	Grade Compensation and Numerical
	5th	Curve: Types of gradient in vertical
	6th	Curve: Different types of road materials
11/04/22	1st	Soil: Aggregate and Binder
to	2nd	Function of gravel and subgrade material
16/04/22	3rd	CBR Test of soil and its necessity
	4th	
	5th	
	6th	Classification of soil.
	1st	Different properties index of soil
	2nd	Necessity of CBR test
18/04/22	3rd	Substratum test of soil
to	4th	Aggregate and silt proportion
23/04/22	5th	Test of aggregate
	6th	Tests of aggregates: Shrinkage values.
	1st	Pavement and its types
	2nd	Function of flexible pavements
25/04/22	3rd	Function of rigid pavements
to	4th	Difference between flexible and rigid pavements
30/04/22	5th	Road-section of roads and its function
	6th	Preparation of sub-grade, sub-base.
	1st	Construction of embankment.
	2nd	
02/05/22	3rd	Gradient and alignment as per IRC
to	4th	sub-base and base Course step construction
07/05/22	5th	Types of stabilization used.
	6th	Base Course and its function

09/05/22	1st	19M and 19N
to	2nd	Different type of Bitumen Construction
14/05/22	3rd	Properties of bitumen
	4th	Test of bitumen
	5th	Cut-back and bitumen emulsion.
	6th	Dispersing, dressing, Prime Coat, Tack Coat etc.
	1st	
16/05/22	2nd	Bituminous Concrete and Grouting
to	3rd	Road pavement, Hill roads, IRRA, etc.
	4th	Cross-sectional details in cutting and filling
21/05/22	5th	All detail parts of cutting and filling
	6th	Retaining wall. Different types of walls
	1st	Cross drainage: culverts and necessity
	2nd	Surface and surface drainage
23/05/22	3rd	side drains, inter-catch drains
to	4th	PPR drain in hills, Cross section
28/05/22	5th	Type of road failure.
	6th	Different type of road cross.
	1st	
	2nd	Maintenance of bituminous Road
30/05/22	3rd	Maintenance of Concrete Road
to	4th	Concept of traffic study
04/06/22	5th	AADT, AADT, WDI and terms of traffic
	6th	Traffic safety and control
	1st	Traffic sign and symbols
	2nd	Hot mix plant
02/06/22	3rd	Different types of construction equipment
to	4th	Special mixer, for bitumen and gravel
11/06/22	5th	Modern Construction Equipment