

Dicipline:	Civil Eng.	Semester: 4 th	Name of the Teaching Faculty: Pratibha Bhuyan.	
Subject:	HE	No of Days/Week Class Allotted: 5	Semester From date: 18.2.23 To date: 23.5.23	No. of Weeks:
WEEK	Class Day	Theory Topics		
1	1st	Introduction		
	2nd	Importance of highway transportation - importance of organization like Indian road congress (IRC)		
	3rd	function of Indian road congress		
	4th	IRC classification of roads		
	5th	Organization of state highway department		
2	1st	Road geometry - Glossary of terms used in geometric design & Importance.		
	2nd	Right of way, Formation width, road margin.		
	3rd	Road shoulder, carriage way, side slope kerb, formation level.		
	4th	Camber and gradient		
	5th	Doubt clearing class		
3	1st	Design and average running speed		
	2nd	Sight distance - stopping sight distance		
	3rd	Problem practice		
	4th	Problem on sight distance		
	5th	class test.		

WEEK	Class Day	Theory Topics
	1st	Passing sight Distance
	2nd	Problem practice
	3rd	Necessity of curves - horizontal and vertical curve
	4th	Problem on horizontal curve and vertical curve
	5th	Transition curve
	1st	Problem practice
	2nd	Super elevation, method of providing Super elevation
	3rd	Problem practice
	4th	class Test
	5th	Doubt clearing class
	1st	Road material - Different type of road material in use
	2nd	Function of highway subgrade
	3rd	CBR - Method of finding CBR value in Laboratory
	4th	Finding CBR value of site and their significance
	5th	Doubt clearing class.

WEEK	Class Day	Theory Topics
Discipline:		Semester:
Subject: WE		Name of the Teaching Faculty:
No of Days/Week Class Allotted: _____		Semester From date: _____ To date: _____
		No. of Weeks:
1st		Testing aggregate : Abrasion test , Impact test .
2nd		Crushing strength test & water absorption test
3rd		Soundness test & uses
4th		class test
5th		Road pavement - flexible and rigid pavement their merits & demerits
1st		Typical cross-section , Function of various component of flexible pavement
2nd		Subgrade preparation - setting out of road & bench mark
3rd		controls pegs for embankment & cutting borrow pits , making profile of embankment
4th		Construction of embankment , Compaction stabilization .
5th		Preparation of subgrade , method of checking camber gradient and alignment as per IRC
1st		Equipment used subgrade preparation
2nd		Subbase course - Necessity of subbase stabilized sub base
3rd		Purpose of stabilization , Types of stabilization - Mechanical , lime , cement Flyash
4th		Base course - Preparation of base course brick soling
5th		Water bound Macadam and wet mix Macadam .

WEEK	Class Day	Theory Topics
	1st	Bituminous construction of different type
	2nd	surfacing - surface dressing : Premix carpet, semi-dense carpet
	3rd	Rigid pavement - concept of concrete road as per IRC specifications
	4th	Hill roads ←
	5th	Typical cross-section showing all details of typical hill road
	1st	cross-section of partially cutting and partially filling hill road
	2nd	Breast wall, Retaining walls
	3rd	Different type of bend & question Practice
	4th	Doubt clearing class
	5th	Road Drainage - necessity of road drainage work
	1st	Surface and sub-surface drains - Storm water drains
	2nd	Location spacing & typical details of side drains & side ditches
	3rd	Intercepting drains - pipe drains on hill roads.
	4th	Details of drains on cutting embankment
	5th	Typical cross-section of drains

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WEEK	Class Day	Theory Topics
	1st	Road maintenance - common types of road failure - their causes & remedies
	2nd	Maintenance of bituminous road patch work and repairing joints
	3rd	Maintenance concrete roads - Rilling crack repairing joints.
	4th	Maintenance of shoulder (berm) & traffic control devices.
	5th	Basic concept of traffic study
	1st	Traffic safety and traffic control signal
	2nd	class Test
	3rd	Construction equipment - Preliminary idea
	4th	Ideal following plant equipment - Hot mix plant, Tipper & tractor
	5th	Scraper, bulldozer, Dumpers, Shovel
	1st	Roller dragline, Asphalt mixer & hot bitumen
	2nd	Road plants
	3rd	Modern construction equipment for roads
	4th	Doubt clearing class
	5th	21/12/23

[Signature]
21/12/23