

NAME OF FACULTY :- MS. JYOTI NARWAL  
 DICIPLINE :- CIVIL ENGG.  
 SEMESTER :- 6TH  
 SUBJECT :- RBT  
 LESSON PLAN DURATION :- FROM JAN, 2018 to APRIL, 2018  
 WORK LOAD PER WEEK :- 5 Lecture/week

THEORY		
Week	Lecture Day	Topic
Assignment/Test		
1st	1	Introduction to Indian Railways
	2	Introduction to Indian Railways
	3	Factors influencing the railways route
	4	brief description of various types of railway survey
	5	brief description of various types of railway survey
2nd	6	Classification of permanent way describing its component parts
	7	Classification of permanent way describing its component parts
	8	Rail Gauge: Definition, types, practice in India
	9	Rail Gauge: Definition, types, practice in India
	10	Rails – types of rails
3rd	11	Rails – types of rails
	12	Rail joints, types of rail joints
	13	fastenings for rails, fish plates, bearing plates
	14	Functions of sleepers, types of sleepers
	15	Functions of sleepers, types of sleepers
4th	16	requirements of an ideal material for sleepers.
	17	Function of ballast, requirements of an ideal material for ballast
	18	Brief description regarding different types of crossings/ signalings
	19	Brief description regarding different types of crossings/ signalings
	20	Necessity, maintenance of track
5th	21	Necessity, maintenance of track
	22	inspection of soil
	23	track and fixtures
	24	maintenance and boxing of ballast maintenance gauges, tools
	25	Features of rail road, bed level, width of formation
6th	26	Features of rail road, bed level, width of formation
	27	side slopes, drains
	28	methods of construction, requirement of drainage system
	29	methods of construction, requirement of drainage system
	30	methods of construction, requirement of drainage system
	31	Test of Part - 1 ( Railway)
7th	32	Bridge – its function and component parts, difference between a bridge and a culvert
	33	Bridge – its function and component parts, difference between a bridge and a culvert
	34	Bridge – its function and component parts, difference between a bridge and a culvert
	35	Classification of Bridges - According to life-permanent and temporary
	36	Classification of Bridges - According to deck level – Deck, through and semi-through
8th	37	Classification of Bridges -According to material –timber, masonry, steel, RCC, pre-stressed
	38	Railway underbridge (RUB)
	39	Beam type –RCC, T-Beam, steel girder bridges
	40	plate girder and box girder, balanced cantilever,
	41	Trussed bridges
9th	42	Arch type – open spandrel and filled spandrel barrel
	43	rib type , Suspension type – unstiffened and stiffened and table
	44	According to the position of highest flood level submersible and non submersible
	45	According to the position of highest flood level submersible and non submersible
	46	Introduction to open foundation, pile foundation, well foundation

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10th	47	Introduction to open foundation, pile foundation, well foundation
	48	Introduction to open foundation, pile foundation, well foundation
	49	Piers-definition, parts; types –solid (masonry and RCC), open
	50	Piers-definition, parts; types –solid (masonry and RCC), open
	51	(straight, splayed, return and curved)
11th	52	(straight, splayed, return and curved)
	53	(straight, splayed, return and curved)
	54	Launching of Equipment Bridges
	55	Purpose of bearings; types of bearings – fixed plate, rocker and roller.
12th	56	Purpose of bearings; types of bearings – fixed plate, rocker and roller.
	57	Purpose of bearings; types of bearings – fixed plate, rocker and roller.
	58	Inspection of Steel and Equipment bridges
	59	Inspection of Steel and Equipment bridges
	60	Routine maintenance
	61	Definition and necessity of tunnels
13th	62	Test of Part-2 (Bridge)
	63	Typical section of tunnels for a national highway and single and double broad gauge railway track
	64	Typical section of tunnels for a national highway and single and double broad gauge railway track
	65	Typical section of tunnels for a national highway and single and double broad gauge railway track
	66	ventilation –necessity and methods of ventilation, by blowing, exhaust and combination of blowing and exhaust
14th	67	ventilation –necessity and methods of ventilation, by blowing, exhaust and combination of blowing and exhaust
	68	ventilation –necessity and methods of ventilation, by blowing, exhaust and combination of blowing and exhaust
	69	Drainage method of draining water in tunnels
	70	Lighting of tunnels
	71	Test of Part-3 (Tunnels)
	72	Revision

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