
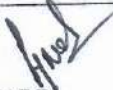


SYNERGY POLYTECHNIC, BBSR

The Lesson Plan

Discipline: <b>Civil Engg</b>	Semester: <b>5th</b>	Name of the Teaching Faculty: <b>Somya Ranjan Behera</b>
Subject: <b>RBE</b>	No of Days/per week class allotted: <b>04</b>	Semester from Date: <b>15/9/22</b> to Date: _____ No of Weeks: _____
Week	Class Day	Theory/Practical Topics
1st	12/11/22 1st	Supere-elevation
	14/11/22 2nd	Its necessity and limiting values.
	15/11/22 3rd	Numericals.
	17/11/22 4th	<b>POINTS AND</b> Def <sup>n</sup> and necessity
	19/11/22 5th	<b>CROSSINGS</b> — do —
2nd	21/11/22 1st	Types of points & crossings (Diagram)
	22/11/22 2nd	— do —
	24/11/22 3rd	<b>LAYING &amp;</b> Methods of laying and maintenance.
	26/11/22 4th	<b>MAINTENANCE</b> Duties of a permanent way inspector.
	28/11/22 5th	
3rd	29/11/22 1st	<b>BRIDGES -</b> Definitions and components
	29/11/22 2nd	Classification & requirements of an <sup>ideal</sup> bridge.
	1/12/22 3rd	Selection of bridge site, Alignment
	3/12/22 4th	Determination of flood discharge.
	3/12/22 5th	— do —
4th	5/12/22 1st	Water-way and economic span.
	5/12/22 2nd	Afflux, clearance & free board.
	6/12/22 3rd	<b>FOUNDATION -</b> Introduction.
	8/12/22 4th	Scour depth
	8/12/22 5th	Min <sup>m</sup> depth of foundation.
5th	10/12/22 1st	Types of bridge foundation.
	10/12/22 2nd	Spread foundation.
	12/12/22 3rd	pile foundation.
	13/12/22 4th	sinking of wells.
	13/12/22 5th	caisson foundation, Cofferdams

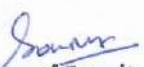
  
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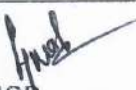
  
HOD

  
Principal

**SYNERGY POLYTECHNIC, BBSR**

Lesson Plan		
Line: <b>Civil Engg</b>	Semester: <b>5th</b>	Name of the Teaching Faculty: <b>Soumyarajnan Bheera</b>
Subject: <b>RBE</b>	No of Days/per week class allotted: <b>04</b>	Semester from Date: <b>15/9/22</b> to Date: No of Weeks:
Week	Class Day	Theory/Practical Topics
1st	1st <b>15/12/22</b>	Bridge substructure.
	2nd <b>15/12/22</b>	Types of piers
	3rd <b>17/12/22</b>	Types of abutments
	4th <b>17/12/22</b>	Types of wing walls.
	5th <b>19/12/22</b>	Approaches.
2nd	1st <b>19/12/22</b>	Types of culverts.
	2nd <b>20/12/22</b>	— do —
	3rd <b>20/12/22</b>	Types of causeways.
	4th <b>22/12/22</b>	Description.
	5th <b>22/12/22</b>	— do —
3rd	1st	
	2nd	
	3rd	
	4th	
	5th	
4th	1st	
	2nd	
	3rd	
	4th	
	5th	
5th	1st	
	2nd	
	3rd	
	4th	
	5th	

  
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SYNERGY POLYTECHNIC, BBSR

The Lesson Plan

Discipline: <b>Civil Engg</b>	Semester: <b>5th</b>	Name of the Teaching Faculty: <b>Soumya Ranjan Behera</b>
Subject: <b>RBE</b>	No of Days/per week class allotted: <b>04</b>	Semester from Date: <b>15/9/22</b> to Date: <b>22/12/22</b> No of Weeks: <b>12</b>
Week	Class Day	Theory/Practical Topics
1st	15/9/22 1st	<b>INTRODUCTION</b> - Railway terminology and advantages.
	19/9/22 2nd	Classification of Indian Railways.
	20/9/22 3rd	<b>PERMANENT WAY</b> Def <sup>n</sup> of permanent way. Components of a permanent way.
	26/9/22 4th	
	27/9/22 5th	
2nd	29/9/22 1st	Diff <sup>r</sup> gauges prevalent in India
	1/10/22 2nd	Suitability of gauges under diff <sup>r</sup> cond <sup>n</sup> .
	8/10/22 3rd	<b>TRACK</b> Rails, junctions & requirements.
	10/10/22 4th	<b>MATERIALS</b> Types of rail sections, length of rails. Rail joints - types & requirement.
	11/10/22 5th	
3rd	13/10/22 1st	Purpose of welding & its advantages
	15/10/22 2nd	Creep → causes and prevention.
	17/10/22 3rd	Sleepers → Def <sup>n</sup> , fun <sup>n</sup> & requirements.
	18/10/22 4th	Classification, advantages & disadvantages.
	20/10/22 5th	Ballast → Function & requirement.
4th	22/10/22 1st	Materials for ballast.
	25/10/22 2nd	Features for broad gauge, Connection of rails to fish plate, fish bolts, sleepers.
	27/10/22 3rd	
	29/10/22 4th	
	31/10/22 5th	<b>GEOMETRIC FOR BROAD GAUGE</b> Typical cross-section of single track. Double broad gauge railway track.
5th	1/11/22 1st	in cutting and embankment.
	3/11/22 2nd	— do —
	5/11/22 3rd	Permanent and temporary land with — continued — —
	7/11/22 4th	
	10/11/22 5th	Gradient for drainage.

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